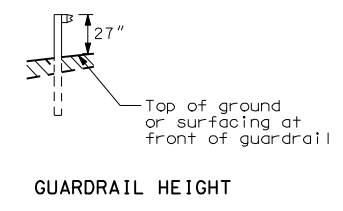
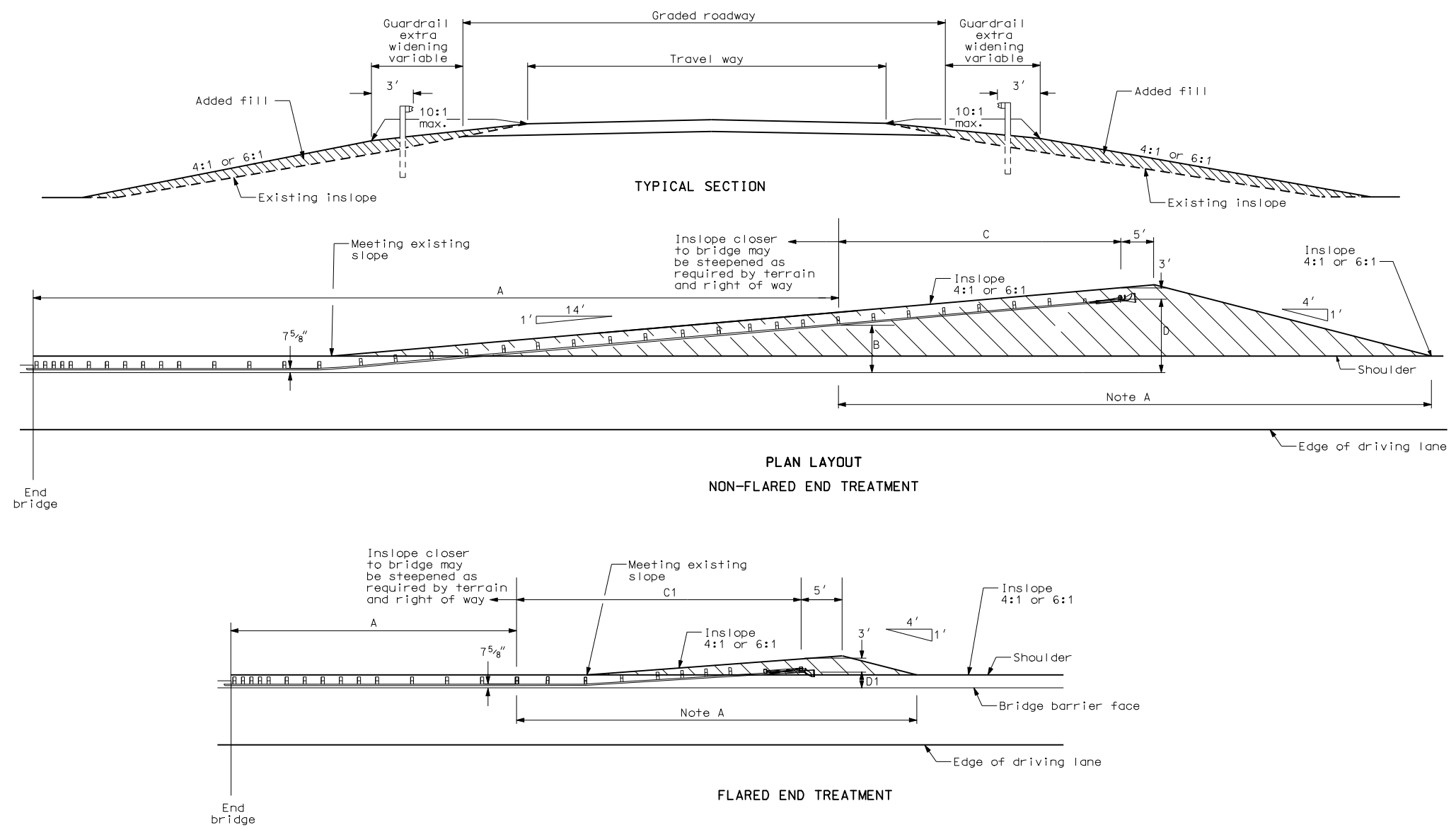


W-BEAM DIMENSION TABLE														
APPROACH SIDE								OPPOSITE SIDE						
DESIGN TRAFFIC VOLUME (ADT)	CLEAR ROWY. WIDTH OF BRIDGE	STRAIGHT AND FLARED GUARDRAIL		END TREATMENT NON-FLARED		END TREATMENT FLARED		STRAIGHT AND FLARED GUARDRAIL		END TREATMENT NON-FLARED		END TREATMENT FLARED		
		A	B	C	D	C1	D1	A	B	C	D	C1	D1	
		FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.
UNDER 250	44	75.6	2.0	49.9	5.5			50.7	0.6	50.0	0.6	49.8	4.6	
	42	75.6	2.0	49.9	5.5			50.7	0.6	50.0	0.6	49.8	4.6	
	40	88.1	2.9	49.9	6.4			50.7	0.6	50.0	0.6	49.8	4.6	
	38	88.1	2.9	49.9	6.4			50.7	0.6	50.0	0.6	49.8	4.6	
	36	100.5	3.8	49.9	7.3			50.7	0.6	50.0	0.6	49.8	4.6	
	34	100.5	3.8	49.9	7.3			50.7	0.6	50.0	0.6	49.8	4.6	
	32	113.0	4.7	49.9	8.2			50.7	0.6	50.0	0.6	49.8	4.6	
	30	113.0	4.7	49.9	8.2			50.7	0.6	50.0	0.6	49.8	4.6	
	28	125.5	5.5	49.9	9.1			50.7	0.6	50.0	0.6	49.8	4.6	
	26	125.5	5.5	49.9	9.1			50.7	0.6	50.0	0.6	49.8	4.6	
	24	138.0	6.4	49.9	10.0			63.1	1.1	49.9	4.7			
	800-250	44	88.1	2.9	49.9	6.4			50.7	0.6	50.0	0.6	49.8	4.6
		42	100.5	3.8	49.9	7.3			50.7	0.6	50.0	0.6	49.8	4.6
		40	100.5	3.8	49.9	7.3			50.7	0.6	50.0	0.6	49.8	4.6
		38	113.0	4.7	49.9	8.2			50.7	0.6	50.0	0.6	49.8	4.6
		36	113.0	4.7	49.9	8.2			50.7	0.6	50.0	0.6	49.8	4.6
		34	125.5	5.5	49.9	9.1			50.7	0.6	50.0	0.6	49.8	4.6
		32	125.5	5.5	49.9	9.1			50.7	0.6	50.0	0.6	49.8	4.6
		30	138.0	6.4	49.9	10.0			50.7	0.6	50.0	0.6	49.8	4.6
		28	138.0	6.4	49.9	10.0			63.1	1.1	49.9	4.7		
		26	150.4	7.3	49.9	10.9			63.1	1.1	49.9	4.7		
		24	150.4	7.3	49.9	10.9			75.6	2.0	49.9	5.5		
		2000-800	44	100.5	3.8	49.9	7.3			50.7	0.6	50.0	0.6	49.8
	42		113.0	4.7	49.9	8.2			50.7	0.6	50.0	0.6	49.8	4.6
	40		113.0	4.7	49.9	8.2			50.7	0.6	50.0	0.6	49.8	4.6
	38		125.5	5.5	49.9	9.1			50.7	0.6	50.0	0.6	49.8	4.6
	36		138.0	6.4	49.9	10.0			50.7	0.6	50.0	0.6	49.8	4.6
	34		138.0	6.4	49.9	10.0			63.1	1.1	49.9	4.7		
	32		150.4	7.3	49.9	10.9			63.1	1.1	49.9	4.7		
	30		150.4	7.3	49.9	10.9			75.6	2.0	49.9	5.5		
	28		162.9	8.2	49.9	11.8			75.6	2.0	49.9	5.5		
	26		162.9	8.2	49.9	11.8			88.1	2.9	49.9	6.4		
	24		175.4	9.1	49.9	12.7			88.1	2.9	49.9	6.4		
	6000-2000		44	113.0	4.7	49.9	8.2			50.7	0.6	50.0	0.6	49.8
		42	125.5	5.5	49.9	9.1			50.7	0.6	50.0	0.6	49.8	4.6
		40	138.0	6.4	49.9	10.0			63.1	1.1	49.9	4.7		
		38	138.0	6.4	49.9	10.0			63.1	1.1	49.9	4.7		
		36	150.4	7.3	49.9	10.9			75.6	2.0	49.9	5.5		
		34	162.9	8.2	49.9	11.8			75.6	2.0	49.9	5.5		
		32	162.9	8.2	49.9	11.8			88.1	2.9	49.9	6.4		
		30	175.4	9.1	49.9	12.7			88.1	2.9	49.9	6.4		
		28	175.4	9.1	49.9	12.7			100.5	3.8	49.9	7.3		
		26	187.8	10.0	49.9	13.6			100.5	3.8	49.9	7.3		
		24	187.8	10.0	49.9	13.6			113.0	4.7	49.9	8.2		
		OVER 6000	44	150.4	7.3	49.9	10.9			63.1	1.1	49.9	4.7	
	42		150.4	7.3	49.9	10.9			75.6	2.0	49.9	5.5		
	40		162.9	8.2	49.9	11.8			75.6	2.0	49.9	5.5		
	38		162.9	8.2	49.9	11.8			88.1	2.9	49.9	6.4		
36	175.4		9.1	49.9	12.7			88.1	2.9	49.9	6.4			
34	175.4		9.1	49.9	12.7			100.5	3.8	49.9	7.3			
32	187.8		10.0	49.9	13.6			100.5	3.8	49.9	7.3			
30	187.8		10.0	49.9	13.6			113.0	4.7	49.9	8.2			
28	200.3		10.9	49.9	14.5			113.0	4.7	49.9	8.2			
26	200.3		10.9	49.9	14.5			125.5	5.5	49.9	9.1			
24	212.8		11.8	49.9	15.3			125.5	5.5	49.9	9.1			

TYPICAL GRADING AT BRIDGE ENDS

WITH  
FLARED W-BEAM GUARDRAIL  
65 MPH DESIGN SPEED



Note:  
The design traffic volumes (ADT) shall be as shown on title sheet under traffic forecast.

Where normal inslope is 4:1, the added fill shall be 4:1.

Where normal inslope is 6:1, the added fill shall be 6:1.

Note A: This area may have to be placed at flatter than 10:1 to provide the proper guardrail height.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION		This document was originally issued and sealed by <b>MARK S GAYDOS,</b> Registration Number <b>PE-4518,</b> on 12/01/04 and the original document is stored at the North Dakota Department of Transportation	
09-01-98			
REVISIONS			
DATE	CHANGE		
10-29-98	Offset dimensions		
12-21-00	Revised Flared end treatment		
04-02-02	Revised table		
12-06-02	Revised table		
12-01-04	PE Stamp added		